

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for providing a glass preform for use as a source for drawing an optical fiber, the method comprising the steps of:

collecting a plurality of first glass rods into a substantially contiguous bundle, wherein each of said first glass rods ~~comprise one of two or more different refractive indices~~ has a single refractive index either higher or lower than a predetermined target refractive index, wherein a numerical average of the refractive index of each substantially all of said first glass rods is substantially equal to a said predetermined target refractive index;

inserting said contiguous bundle into a glass tube, wherein said glass tube has an inside diameter chosen to contain said contiguous bundle, forming thereby a preform assembly; and

heating said preform assembly to a glass fusion temperature and causing said preform assembly to fuse to form a solid glass preform such that said chemical composition of each of said first glass rods is maintained in a location proximate or about coincident with a position of each said glass rods within said contiguous bundle.

2. (canceled)

3. (previously presented) The method of claim 1, wherein said step of heating further comprises heating said contiguous bundle such that fusion begins at one end progresses along a length of said preform assembly.

4. (canceled)

5. (previously presented) The method of claim 1, wherein said first glass rods are randomly distributed throughout said contiguous bundle.

6. (previously presented) The method of claim 1, wherein said first glass rods are

evenly and non-randomly placed throughout said contiguous bundle.

7. (canceled)

8. (currently amended) ~~The method of claim 1, wherein the step of inserting said contiguous bundle further includes the steps of~~ A method for providing a glass preform for use as a source for drawing an optical fiber, the method comprising the steps of:

collecting a plurality of first glass rods into a substantially contiguous bundle, wherein each of said first glass rods has a single refractive index either higher or lower than a predetermined target refractive index, wherein a numerical average of substantially all of said first glass rods is substantially equal to a said predetermined target refractive index;

inserting said contiguous bundle into a glass tube, wherein said glass tube has an inside diameter chosen to contain said contiguous bundle, forming thereby a preform assembly;

removing one or more groups of contiguous first glass rods from said preform assembly[[,]];

and-replacing said one or more groups of first glass rods with an equivalent number of groups of contiguous second glass rods, wherein said second glass rods comprise a physical or chemical property whose value is different than a value of said same physical or chemical property of said first glass rods, wherein said one or more groups are disposed about a center axis of said contiguous bundle; and

heating said preform assembly to a glass fusion temperature and causing said preform assembly to fuse to form a solid glass preform such that said chemical composition of each of said first glass rods is maintained in a location proximate or about coincident with a position of each said glass rods within said contiguous bundle.

9. (previously presented) The method of claim 8, wherein the steps of removing and replacing further include the step of partially displacing said one or more groups.

10. (canceled)

11. (previously presented) The method of claim 9, wherein the step of partially displacing is performed by inserting a stepped template into one end of said glass tube and against one end of each of said first glass rods, said stepped template having one or more steps or one or more removable plugs.

12. (previously presented) The method of claim 11, wherein said one or more removable plugs have a desired shape and size and are located in a desired position in a cross section of said preform assembly.

13. (previously presented) The method of claim 12, wherein one or more of said removable plugs are removed to provide longitudinal spaces to act as guides for inserting and fully displacing each of said one or more groups of said first glass rods with said one or more equivalent groups of said second glass rods.

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